

ALABAMA HAZARDOUS WASTES MANAGEMENT AND MINIMIZATION ACT (AHWMMA) <u>COMPLIANCE EVALUATION INSPECTION (CEI) REPORT</u>

1) AUTHOR OF REPORT

Jonah Harris

Environmental Scientist Sr.

Compliance and Enforcement, Industrial Hazardous Waste Branch

Alabama Department of Environmental Management (ADEM)

1400 Coliseum Boulevard

Montgomery, AL 36110

2) <u>FACILITY INFORMATION</u>

Valmont Coatings Inc. d/b/a Valmont Birmingham Galvanizing (Valmont)

475 Dietrich Road

Steele (St. Clair County), AL 35987

EPA Identification Number: ALR000013490

NAICS Code(s): 332812

3) RESPONSIBLE OFFICIALS

Mr. Randle Cunningham, General Manager

Telephone: 205-594-5555

Email: randle.cunningham@valmont.com

4) INSPECTION PARTICIPANTS

Mr. Randle Cunningham, General Manager - Valmont

Mr. James McDonough, EHS Coordinator - Valmont

Ms. Sally Buck, Corporate Environmental - Valmont

Ms. Paula Whiting, Environmental Engineer – US EPA Region 4

Mr. Jonah Harris, Environmental Scientist Sr. - ADEM

5) DATE OF INSPECTION

June 24, 2019

6) APPLICABLE REGULATIONS

ADEM Administrative Code Division 335-14, Hazardous Waste Program Regulations

7) PURPOSE OF INSPECTION

The purpose of the inspection was to determine the facility's compliance with all applicable standards of Division 14 of the ADEM Administrative Code.



8) FACILITY DESCRIPTION

Valmont is a hot dip galvanizing operation specializing in the application of zinc coatings to steel products (including utility poles, shelves, and cylindrical tanks). The facility is located on an 82-acre lot and consists of a 148,000 square foot production area (an open-sided corrugated metal structure with a concrete floor) with an attached office building. The production area is divided into three sections: one for preparation and storage of products from third party clients, one housing the facility's galvanizing lines, and one for preparation and storage of products (primarily steel utility poles) from Valmont Coatings Inc.'s off-site manufacturing facilities. Valmont currently employs approximately 70 people. The facility's typical hours of operation are from 6:00 am to 11:00 pm on weekdays. According to its last submittal of ADEM Form 8700-12 (which was received by the Department on January 29, 2019), Valmont is a large quantity generator of hazardous waste and a used oil generator.

9) OBSERVATIONS

Ms. Whiting and I arrived at the facility at approximately 11:30 am and were subsequently greeted by Mr. Cunningham and Mr. McDonough. During the opening conference that followed, Ms. Whiting and I identified ourselves and explained the purpose of the inspection. Mr. Cunningham and Mr. McDonough explained that the facility's hot dip galvanizing process consists of cleaning steel products by submerging them in a sodium hydroxide bath followed by a series of hydrochloric acid rinse tanks, submerging the products in a pre-flux tank containing zinc chloride and ammonium chloride, dipping the products in a molten zinc bath, then quenching the products in a weak sodium bichromate solution (if necessary). Some products are coated with an additional layer of polyvinyl paint (depending on customer specifications).

According to Mr. Cunningham and Mr. McDonough, the following wastes are generated at the site: waste acid removed from process tanks (D002, D006, D007, D008); sludge generated during tank cleanouts (D002, D007); methyl ethyl ketone (MEK) used to clean paint guns and brushes (D001, D035, F005); rags and personal protective equipment (PPE) contaminated with MEK (D035, F005); metal skins and dross removed from the molten zinc tank; used aerosol cans; universal waste lamps, and used oil. According to Mr. Cunningham and Mr. McDonough, the contents of the facility's hydrochloric acid tanks are tested weekly to ensure they meet certain specifications. When the contents of a tank become unusable, the spent acid is pumped directly into a tanker truck and immediately shipped off-site. Metal skins (thin layers of solidified metal that form on the surface of the molten zinc dip tank) are manually removed from the surface of the molten zinc using metal paddles and baskets. The skins are placed in a metal pot, which is subsequently introduced into a mechanical zinc recovery (MZR) unit. Usable zinc recovered in the MZR is melted into ingots, which are later reused in the molten zinc dip tank. Unusable materials removed from the MZR are placed in open-top metal 55-gallon drums and sold as a product to third party companies (to be further used as a source of zinc). Dross generated in the zinc dip tank is managed in the same manner as unusable materials removed from the MZR. Used aerosol cans containing paint, zinc, and other materials are punctured and drained into a closed-top metal 55-gallon drum. Aerosol cans emptied in this manner are sent off-site to be recycled. Materials removed from the cans are reused on-site, according to Mr. Cunningham and Mr. McDonough.

Following the opening conference, Mr. Cunningham and Mr. McDonough accompanied Ms. Whiting and me on a tour of the facility. During the walk-through inspection, we observed the following areas:

A) Non-Valmont Product Processing / Storage Area

Mr. Cunningham and Mr. McDonough first escorted us on a tour of the non-Valmont product processing / storage area, which occupies the northwestern portion of the production area. The facility's central hazardous waste accumulation area (CAA) was located in the northern portion of this area, near a receiving dock. The CAA was separated from the rest of the production floor by a waist-high chain. One plastic 5-gllon bucket of used oil was staged on a plastic spill control pallet in the CAA at the time of the inspection. The bucket was open and unlabeled (refer to Photograph #1 through Photograph #3 in the attached photo



log). The spill control pallet also contained used oil. It, too, was open and unlabeled. No hazardous wastes were staged within the CAA at the time of the inspection. Forty four open-top metal 55-gallon drums containing burnt skins (unusable materials removed from the MZR) were staged near the CAA. The containers were open and unlabeled (see Photograph #4).

One wheel abrader machine (which is used instead of a caustic solution to clean some parts) was located near the CAA. One open, unlabeled open-top metal 55-gallon drum containing used blast media was staged next to the wheel abrader. According to Mr. Cunningham and Mr. McDonough, the blast media will be reused on-site. One open, unlabeled closed-top plastic 55-gallon drum was also staged near the wheel abrader (see Photograph #5). According to Mr. Cunningham and Mr. McDonough, the drum contained water contaminated with mud and diesel sludge. They stated that a small amount of mud and diesel sludge was generated when facility personnel moved a diesel fuel storage tank into the building. The mud and sludge were washed into a sump located in the receiving dock and subsequently pumped from the sump into the abovementioned drum (see Photograph #6 and Photograph #7). Waste was being added to the drum (via a hose inserted into the drum's bung hole) at the time of the inspection. According to Mr. Cunningham and Mr. McDonough, a waste determination had not yet been performed on the material.

B) Galvanizing Area

Mr. Cunningham and Mr. McDonough next accompanied us to the facility's galvanizing area, which is located in the approximate center of the production area. The facility operates two galvanizing lines: the Spin Line (which is used to apply coatings to non-Valmont products) and the Main Line (which consists of larger dip tanks and is primarily used to apply coatings to utility poles). The Spin Line consists of a wheel abrader (located in the non-Valmont product processing / storage area), three hydrochloric acid baths, one rinse tank containing water, a heated pre-flux tank, a zinc bath, and a centrifuge system (which is used to remove excess zinc from the products). The Main Line consists of one sodium hydroxide bath, four hydrochloric acid baths, one rinse tank containing water, one pre-flux tank containing zinc chloride and ammonium chloride, one zinc bath, and one sodium bichromate quench tank. The floor underneath the Main Line was composed of acid-resistant bricks and was surrounded by a concrete berm. Liquids were observed on the floor of this containment area during the inspection. According to Mr. Cunningham and Mr. McDonough, any liquids spilled from the tanks are squeegeed by facility personnel into a corner of the containment area and then pumped back into the process tanks.

Thirteen open-top metal 55-gallon drums containing zinc dross were staged near the northern end of the galvanizing area. The containers were open and unlabeled (see Photograph #8). One open-top metal 55-gallon drum of burnt skins was also staged in this area. It, too, was open and unlabeled (see Photograph #9). One metal pot containing unprocessed zinc skins was staged near the zinc bath on the Main Line (see Photograph #10). It was open and unlabeled. Valmont's MZR machine was located on the south side of the galvanizing area. Four open-top metal 55-gallon drums containing zinc dross was staged near the MZR. The drums were open and unlabeled (see Photograph #11).

C) Valmont Product Processing / Storage Area

Mr. Cunningham and Mr. McDonough next accompanied us on a tour of the Valmont product processing / storage area, which occupies the southeastern portion of the production area. One can puncture station (a closed-top metal 55-gallon drum with a can puncture unit screwed into its large bung hole and an air filter screwed into its small bung hole) was staged in this area. The container was open (the lid on the can puncture unit was not closed) and unlabeled (see Photograph #12 and Photograph #13). Two open-top metal 55-gallon drums containing punctured aerosol cans were staged next to the can puncture station. One was open and labeled with the words "Puntured Cans" (see Photograph #14). One was closed and labeled with the words "Spray Cans" (see Photograph #15). One open-top metal 55-gallon drum containing empty paint cans was also staged in this area. The container was open (its lid was not secured) and labeled with the words "Gallon Cans" (see Photograph #16).



A painting area (where facility employees use paint guns to apply a 2-part polyvinyl coating to some utility poles) was located in the southern portion of the Valmont product processing / storage area. The floor in this area was covered with dried polyvinyl paint. At the time of the inspection, a facility employee was observed using a chisel to remove dried polyvinyl paint from the floor and subsequently placing the material in unmarked containers (see Photograph #17 and Photograph #18). Mr. Cunningham and Mr. McDonough stated that this material was non-hazardous. An enclosed negative-pressure blasting unit was also located in this area. Used blast media was being collected in a drum attached to the unit. Four open, unlabeled open-top metal 55-gallon drums containing used blast media were staged near the painting area. According to Mr. Cunningham and Mr. McDonough, the blast media will be reused on-site.

A separate paint mixing room (where facility employees prepare polyvinyl coatings and where facility personnel clean paint guns, brushes, and other equipment used to apply polyvinyl coatings) was located adjacent to the painting area. One closed-top metal 55-gallon drum of new MEK with a faucet screwed into its bung hole was staged above a plastic catch basin in the paint mixing room. The catch basin underneath the drum contained MEK and two paint brushes (which were being cleaned). Small containers of new MEK (used for cleaning paint guns, brushes, and other equipment) were staged throughout the paint mixing room. The following satellite accumulation containers were staged in a corner of the paint mixing room:

- One open-top metal 55-gallon drum of used MEK that was open (a lidded metal funnel was screwed into the drum's bung hole but the lid on the funnel was not secured) and labeled with the words "Waste MEK & Paint" (see Photograph #19);
- One 5-gallon metal step can of MEK-contaminated rags and PPE that was closed, labeled with the words "Waste MEK Contaminated Rags & Wipes", and labeled with a "Flammable Solid" placard (see Photograph #20); and
- One plastic 0.5-gallon cup of used MEK that was open and unlabeled (see Photograph #21).

Following the walk-through inspection, Mr. Cunningham and Mr. McDonough provided us with the following documents for review: waste profiles (including the profile for waste polyvinyl paint); manifests for shipments of hazardous waste, universal waste, and used oil; job titles / descriptions for employees that manage hazardous waste at the facility; records indicating that hazardous waste management training has been provided to facility personnel; a waste minimization plan; records of weekly inspections of the facility's CAA; the facility's contingency plan; and records indicating that copies of the contingency plan have been delivered to local emergency response agencies. Our review and evaluation of these records showed the following:

- According to the facility's waste profiles, waste polyvinyl paint (CorroCote[™] Parts A and B) is non-hazardous based on generator knowledge;
- Waste acids removed from the facility's rinse tanks is picked up by Vickery Transportation, Inc. (OHR000103762) and delivered to Vickery Environmental, Inc. (OHD020273819);
- Other hazardous wastes generated on-site are picked up by Homeland Environmental Solutions, LLC (ALR000046870) and delivered to Clean Earth of Alabama (ALD981020894);
- Used oil is picked up by Safeway Industrial Services, LLC (ALR000053272) and delivered to Giant Resource Recovery Attalla, Inc. (ALD070513767);
- Universal waste lamps are transported by Mr. McDonough to Lowe's Home Improvement of Gadsden, Alabama;
- Hazardous waste management training ("General Awareness, Safety and Security" and "DOT: Hazardous Shipper") was last provided to facility employees in 2018;
- With one exception (a weekly inspection log dated January 29, 2019), records of weekly inspections of the facility's CAA after December 21, 2018 were not available for review;



- Valmont's contingency plan was last updated on January 22, 2019 and did not include a list of emergency equipment or a quick reference guide;
- Copies of the contingency plan were delivered to the ADEM Land Division, the Alabama Emergency Management Agency (EMA), the Ashville Fire Department, the Ashville Police Department, and the St. Clair County EMA in January of 2019;
- According to Mr. Cunningham and Mr. McDonough, the facility's contingency plan is currently undergoing additional revisions.

10) <u>Summary</u>

The following areas of concern were noted during the inspection:

- Two containers (one 5-gallon bucket and one plastic spill control pallet) holding used oil were not closed;
- Two containers (one 5-gallon bucket and one plastic spill control pallet) holding used oil were not labeled with the words "Used Oil":
- Two satellite accumulation containers of hazardous waste (one 55-gallon drum of waste MEK and one 0.5g-gallon cup of waste MEK) were not closed;
- Three satellite accumulation containers of hazardous waste (one 55-gallon drum of waste MEK, one 5-gallon step can of MEK-contaminated rags and PPE, and one 0.5g-gallon cup of waste MEK) were not labeled with the words "Hazardous Waste";
- A waste determination had not been performed on one 55-gallon drum of diesel-contaminated water;
- With one exception (a weekly inspection log dated January 29, 2019), records of weekly inspections of the facility's CAA after December 21, 2018 were not available for review;
- The facility's contingency plan did not include a list of all emergency response equipment available at the site; and
- The facility's contingency plan did not include a quick reference guide.

Following the document review, Ms. Whiting and I discussed our observations with Mr. Cunningham, Mr. McDonough, and Ms. Buck (via video conference) in a closing conference. At the conclusion of the closing conference, I prepared a *Preliminary Inspection Report* describing the abovementioned areas of concern and presented it to Mr. Cunningham. He reviewed, signed, and accepted the *Preliminary Inspection Report* on behalf of Valmont. Ms. Whiting and I concluded the closing conference and departed the site at approximately 3:30 pm.

11) SIGNED

Compliance and Enforcement Section Industrial Hazardous Waste Branch Land Division

July 2, 2019

Date



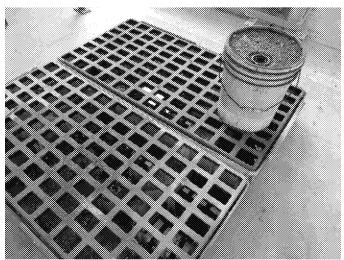
12) **CONCURRENCE**

Brent A. Watson, Chief Compliance and Enforcement Section Industrial Hazardous Waste Branch Land Division

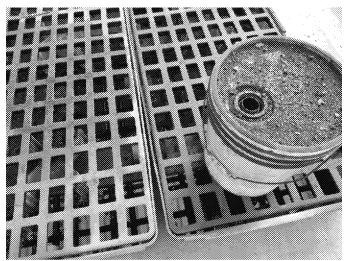
July 2, 2019 Date

Attachment: Photographs of the Installation

File: 16431 ALR000013490 115 20190702 HWTM Trip Report



Photograph #1: open, unlabeled containers of used oil in the CAA



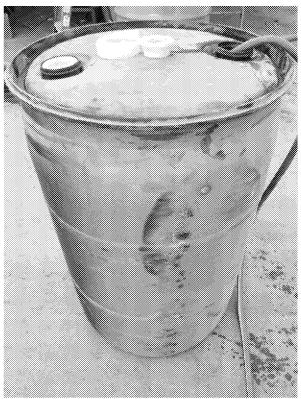
Photograph #2: open, unlabeled containers of used oil in the CAA



Photograph #3: open, unlabeled containers of used oil in the CAA



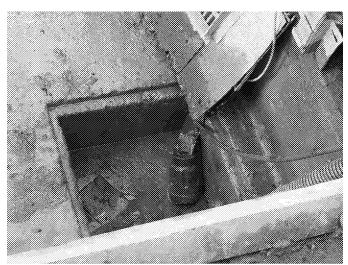
Photograph #4: containers of "burnt skins" near the CAA



Photograph #5: unlabeled container of dieselcontaminated water near the CAA



Photograph #6: sump containing diesel-contaminated water



Photograph #7: sump containing diesel-contaminated water



Photograph #8: containers of zinc dross in the galvanizing area



Photograph #9: container of "burnt skins" in the galvanizing area



Photograph #10: pot of zinc skins in the galvanizing area



Photograph #11: containers of zinc dross in the galvanizing area



Photograph #13: aerosol can puncture station in the Valmont product processing / storage area



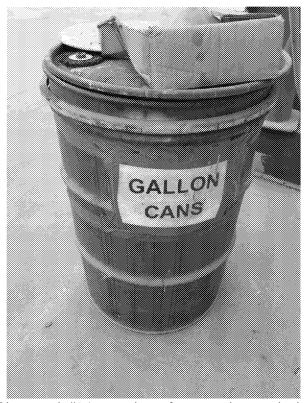
Photograph #12: aerosol can puncture station in the Valmont product processing / storage area



Photograph #14: container of punctured aerosol cans in the Valmont product processing / storage area



Photograph #15: container of punctured aerosol cans in the Valmont product processing / storage area



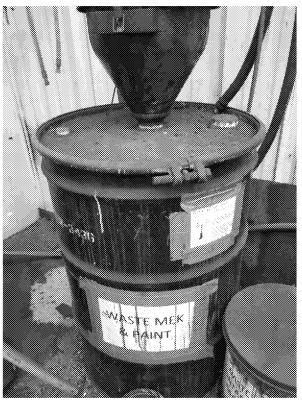
Photograph #16: container of empty paint cans in the Valmont product processing / storage area



Photograph #17: floor scrapings generated in the painting area



Photograph #18: floor scrapings generated in the painting area



Photograph #19: open, improperly labeled satellite accumulation container in the paint mixing room



Photograph #20: improperly labeled satellite accumulation container in the paint mixing room



Photograph #21: open, improperly labeled satellite accumulation container in the paint mixing room